

This listing of the claims replaces any and all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS

1. (Previously presented) A compound having the formula (I):



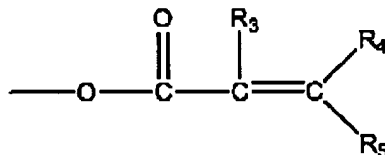
wherein

R₁ is a hydrocarbon radical comprising 1 to 10 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

R₂ is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

V₁ is a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle;

V₂ has the formula (II)



wherein R₃, R₄, and R₅ are independently selected from the group consisting of H and a C1-C4 alkyl group, wherein each C1-C4 alkyl group is independently substituted or not substituted.

2. (Original) The compound according to Claim 1, wherein the ring system of V₁ is an unsaturated, 5 or 6 membered monocyclic ring system.

3. (Original) The compound according to Claim 2, wherein the unsaturated or aromatic, 5 or 6 membered monocyclic ring system is selected from the group consisting of imidazole, pyrazole, 1,2,4-triazole, tetrazole and pyrazine.

4. (Original) The compound according to Claim 1, wherein the ring system of V_1 is a saturated, 5 or 6 membered monocyclic ring system.

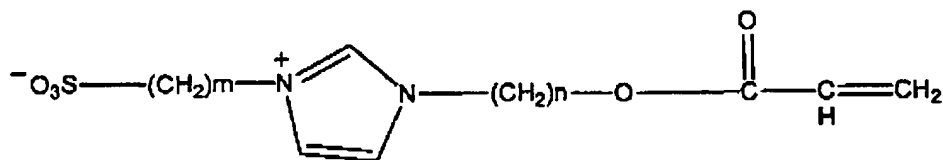
5. (Original) The compound according to Claim 4, wherein the saturated, 5 or 6 membered monocyclic ring system is selected from the group consisting of piperazine and imidazoline.

6. (Original) The compound according to Claim 1, wherein the bicyclic ring system of V_1 is an unsaturated, 9 member bicyclic ring system.

7. (Original) The compounds according to Claim 6, wherein the unsaturated, 9 member bicyclic ring system is selected from the group consisting of benzimidazole, purine and indazole.

8. (Canceled)

9. (Previously presented) The compound according to Claim 1, having the formula (III):



wherein $1 \leq m \leq 10$ and $6 \leq n \leq 20$.

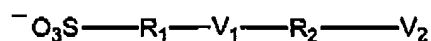
10. (Original) The compound according to Claim 1, having the structural formula (IV):



where $6 \leq n \leq 20$, $1 \leq m \leq 10$, $\text{X} = \text{Na}^+$, Li^+ , NH_4^+ , and V is (methyl)acrylate or another copolymerizable unsaturated group.

Claims 11 and 12 are canceled.

13. (Previously presented) An ion conducting membrane comprising a copolymer, wherein said copolymer comprises a monomer having the formula (I):



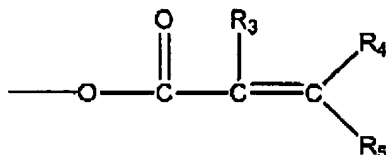
wherein

R_1 is a hydrocarbon radical comprising 1 to 10 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

R_2 is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

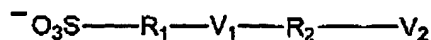
V_1 is a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle;

V_2 has the formula (II):



wherein R_3 , R_4 , and R_5 are independently selected from the group consisting of H and a C1-C4 alkyl group, wherein each C1-C4 alkyl group is independently substituted or not substituted.

14. (New) A process for the preparation of a compound having the formula (I):



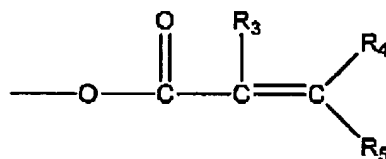
wherein

R_1 is a hydrocarbon radical comprising 1 to 10 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

R₂ is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

V₁ is a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle;

V₂ has the formula (II):



wherein R₃, R₄, and R₅ are independently selected from the group consisting of H and a C1-C4 alkyl group, wherein each C1-C4 alkyl group is independently substituted or not substituted,

said process comprising:

a) reacting a compound having a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle,

with an alcohol having the structure:



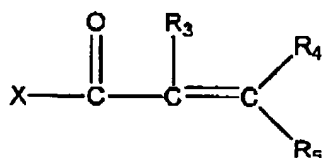
wherein

X' is halogen, and

R₂ is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

b) reacting the product obtained from a) with a sulfone; and

c) reacting the product obtained from b) with a compound having the formula (IIa):



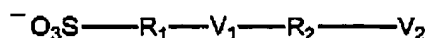
wherein

X is a halogen; and

R_3 , R_4 and R_5 are independently selected from the group consisting of H and a C1-C4 alkyl, wherein each C1-C4 alkyl group is independently substituted or not substituted.

15. (New) A process for producing an ion conducting membrane, comprising copolymerizing at least one copolymerizable surfactant with a copolymerizable monomer in a bicontinuous microemulsion polymerization mixture, said mixture comprising :

- i) about 15% to 50% by weight of water;
- ii) about 10% to 50% by weight of at least one copolymerizable surfactant having the formula (I) :



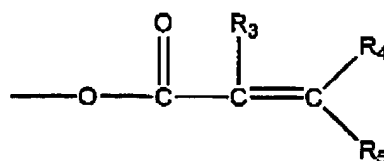
wherein

R_1 is a hydrocarbon radical comprising 1 to 10 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

R_2 is a hydrocarbon radical comprising 6 to 20 main chain carbon atoms, wherein hydrogen atoms bonded to the main chain carbon atoms are independently substituted or not substituted;

V_1 is a saturated or unsaturated, monocyclic or bicyclic ring system comprising 5 to 9 ring atoms, wherein at least 2 ring atoms are nitrogen atoms, said nitrogen atoms being comprised in the same cycle;

V_2 has the formula (II):



wherein R_3 , R_4 , and R_5 are independently selected from the group consisting of H and a C1-C4 alkyl group, wherein each C1-C4 alkyl group is independently substituted or not substituted,

and

- iii) about 5% to 40% by weight of at least one copolymerizable monomer;
- wherein said weight percents are based on the total weight of the microemulsion.